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Command line parameters:

-MODEL-frame+_p2n.model -DEV=xlh
-Q-/cgn2_1/USPTO_spool/US09807459/runat_18102002_141112_28595/app_query.fasta_1.647
-Q-/cgn2_1/USPTO_spool/US09807459/runat_18102002_141112_28595/app_query.fasta_1.647
-Q-/cgn2_1/USPTO_spool/US09807459/runat_18102002_141112_28595/app_query.fasta_1.647
-DB-EST -OFMT=fastap -SUFETX=rst -MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0
-UNITS=bits -START=1 -END=-1 -MATRIX=Dlosum62 -TRANS=Duman40.cd1 -LIST=45
-DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=40 -MODE=LOCAL
-OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000
-USER-US09807459_eCGN_1_1763_erunat_18102002_141112_28595 -NCPU=6 -TCPU=3
-NO_XLPXY -NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -LONGLOG -DEV_TIMEOUT=120
-WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7
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AZ167872
AZ167872.1 GI:8338240
                                                                                                                                                                                                                                                                                                                                  Cameron,R.A., Mahairas,G., Rast,J.P., Martinez,P., Biondi,T.R., Swartzell,S., Wallace,J.C., Poustka,A.J., Livingston,B.T., Wray,G.A., Ettensohn,C.A., Lehrach,H., Britten,R.J, Davidson,E.H. a
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Strongylocentrotus purpuratus.
Strongylocentrotus purpuratus
Eukaryota, Metazoa; Echinodermata; Eleutherozoa; Echinozoa;
Echinoidea; Euechinoidea; Echinocea; Echinoidea;
Contact: Cameron, RA, Davidson, EH,
Division of Biology 156-29
California Institute of Technology
                                                                                                                                                                                                            A sea urchin genome project: Sequence scan, virtual map, and additional resources % \left( 1\right) =\left\{ 1\right\} =
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AZ140870 SP_0001_B
AZ140871 SP_0001_B
AZ199581 SP_1039_B
AZ400717 1M0167E11
AL131027 Tetraodon
AA571652 vm09c03.r
BH098592 RPCI-24-2
AZ766807 1M0564C11
AZ152840 SP_0034_B
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BB230024 BB230024
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Email: acameron@caltech.edu
Plate: 103 row: I column:
Seq primer: T7
Class: BAC ends
                                   BM275292 564 bp mRNA linear EST 20-DEW PfESToaa66fll.yl Plasmodium falciparum 3D7 gametocyte cDNA lil Plasmodium falciparum 3D7 cDNA 5' similar to TR:097255 097255
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Tel: (626) 395-8421
Fax: (626) 793-3047
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/clone_lib="Strongylocentrotus purpuratus,
urchin, sperm genomic BAC library"
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US-09-807-459-2 (1-458) x BM275292 (1-564)
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{\tt AspAlaLysAspLeuPheGluAsnLysIleGlyGlnGlyThrValAspPheIleAsnAsn}
                                                                   PhePheAsnLysGluIleArgAspPro---SerLysAlaLeuLysGluLysValSerAsn
                                                                                                                                                                                  CCAATAAATGACCCAATAAATGACCCAATAAATGACCCAATAAATGACCCAATAAATGAC
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WashU Plasmodium EST Project
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu
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Plasmodium falciparum 3D7
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Location/Qualifiers
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/lab host="ph10B (GeneHog, Invitrogen, Inc.)"
/lab host="ph10B (GeneHog, Invitrogen, Inc.)"
/note="Wector: pBluescript SK plus; Site_1: EcoRI; Site_2: XhoI; The library was constructed by R Haywood. cDMAs were synthesized from ganetocyte poly(A)+ RMA by oligo d(T) priming, size-selected and directionally cloned into the EcoRi (5' end) to XhoI (3' end) sites of the Uni-ZAP XR lambda vector (Stratagene). The primary library was mass excised as phagemid using the ExAssist helper phage (Stratagene), the phagemids were precitptated with PEG 8000 and extracted with phenolychloroform. Phagemid DNA was electroporated into DH10B cells. Clone Availability: David Sibley, Washington University."
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952 bp DNA linear GSP_0106_A2_A12_SP6E Strongylocentrotus purpuratus, pu urchin, sperm genomic BAC library Strongylocentrotus genomic clone Plate=106 Col=24 Row=A, DNA sequence.
AZ209422
                                                                                                                                                                                                                                                                                           Division of Biology 156-29
California Institute of Technology
Pasadena California 91125, USA
Tel: (626) 395-8421
Fax: (626) 793-3047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Strongylocentrotus purpuratus
Eukaryota; Metazoa; Echinodermata; Eleutherozoa; Echinozoa;
Echinoidea; Euechinoidea; Echinacea; Echinoida;
                                                                                                                                                                                                                                                     Email: acameron@caltech.edu
Plate: 106 row: A column:
Seq primer: SP6
                                                                                                                                                                                                                                                                                                                                                                                                                            Cameron,R.A., Mahairas,G., Rast,J.P., Martinez,P., Biondi,T.R., Swartzell,S., Wallace,J.C., Poustka,A.J., Livingston,B.T., Wray,G.A., Ettensohn,C.A., Lehrach,H., Britten,R.J, Davidson,E.H. and G.A., Ettensohn,C.A., Lehrach,H., Britten,R.J, Davidson,E.H.
                                                                                                                                                                                                                                                                                                                                                                                                                    Hood
                                                                                                                                                                                                                                                                                                                                                        Contact: Cameron,
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/db_xref="taxon:7668"
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Conservative:
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US-09-807-459-2 (1-458) x AZ209422 (1-952)
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Eukaryota; Metazoa; Echinodermata; Eleutherozoa;
Echinoidea; Euechinoidea; Echinacea; Echinoida;
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856 bp DNA linear GSS 31-AUG-ZUVV SP_1039_B2_E12_T7A Strongylocentrotus purpuratus, purple sea urchin, sperm genomic BAC library Strongylocentrotus purpuratus genomic clone Plate=1039 Col=24 Row=J, DNA sequence.
                                                                                                                                                                                                                                                                                     Tel: (626) 395-8421
Fax: (626) 793-3047
                                                                                                                                                                                                                                                                                                                                               Division of Biology 156-29
California Institute of Technology
Pasadena California 91125, USA
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                                                                                                                                                                   Class: BAC ends
                                                                                                                                                                                                                                Email: acameron@caltech.edu
Plate: 1039 row: J column:
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1 (bases 1 to 856)
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AZ199582.1 GI:8394390
                                                                                                                                                                                                  Seq primer: T7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         additional resources
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Location/Qualifiers
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                     /organism="Strongylocentrotus purpuratus"
/db_xref="taxon:7668"
/clone="Plate=1039
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          Contact: Opperman, C
Center for the Biology of Nematode Parasitism
NC State University; IACR-Rothamsted
Campus Box 7616; Raleigh, NC 27695, USA
Tel: 919.515.6699
                                                                                               Heer, J., Sosinski, B., Pokrzywa, R.M., Warry, A. Mixed Stage EST's from Globodera pallida, the Unpublished (2001)
                                                                                                                                                               Globodera pallida.
Globodera pallida
Globodera pallida
Eukaryota, Metazoa, Nematoda, Chromadorea, Tylenchida,
Tylenchoidea, Heteroderidae, Heteroderinae, Globodera.
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PCNGT11-3_R_F04_PCN_R_031.ab1
Location/Qualifiers
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/db_xref="taxon:36090"
/clone_lib="Mixed Stage EST's from Globodera
potato cyst nematode"
/note=""""
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Library was constructed by R. Haywood. DNA sequencing
Washington University Genome Sequencing Center For inf
obtaining a clone please contact: L. David Sibley
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WashU Plasmodium EST Project washington University School of Medicine 4444 Forest Park Parkway, Box 8501, St. 1 Tel: 314 286 1800
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WashU Plasmodium EST Project
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314 286 1810
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//lab_host="DHIOB (GeneHog, Invitrogen, Inc.)"
//note="vector: pBluescript SK plus; Site_1: EcoRI; Site_2: XhoI; The library was constructed by R Haywood. cDNAs were synthesized from ganetocyte poly(A) + RNA by oligo d(T) priming, Size-selected and directionally cloned into the EcoRi (5' end) to XhoI (3' end) sites of the Uni-ZAP XR lambda vector (Stratagene). The primary library was mass excised as phagemid using the Exassist helper phage (Stratagene), the phagemids were precitytated with PEG 8000 and extracted with phenol/chloroform. Phagemid DNA was electroporated into DHIOB cells. Clone Availability: David Sibley, Washington University."

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∕db_xref="taxon:36329"
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Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tang, K., Cole, R., Chakrabarti, D., Haywood, R., Clifton, S., Pape, D., Marra, M., Hillier, L., Martin, J., Wylie, T., Dante, M., Theising, B., Bowers, Y., Gibbons, M., Ritter, E., Bennett, J., Jentes, E., Ronko, T. Tsagareishvili, R., Belaygorod, L., Franklin, C., Carr, L., Grow, A., Maguire, L., Richey, J., Wadkins, J., Kennedy, S., Levinso, D., Waterston, R., Wilson, R. and Sibley, D.
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Library was constructed by R. Haywood. DNA sequencing by: Washington University Genome Sequencing Center For inform obtaining a clone please contact: L. David Sibley (sibley@borcim.wustl.edu), Washington University
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tel: 314 286 1800
Fax: 314 286 1810
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XhOI; The library was constructed by R Haywood. cDNAs were synthesized from ganetcocyte poly(A)+ RNA by oligo d(T) priming, size-selected and directionally cloned into the EcoRi (5' end) to XhOI (3' end) sites of the Uni ZAP XR lambda vector (Stratagene). The primary library was mass excised as phagenid using the ExAssist helper phage (Stratagene). Clones were mass excised using the ExAssist
                                                                                                                                                                                                                                                    library"
                                                                                                                                                                    /dev_stage="gametocyte (stage III-V)"
/lab_host="DH10B (GeneHog, Invitrogen, Inc.)"
/note="Vector: pBluescript SK plus; Site_1: EcoRI; Site_2:
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                                          additional
                                                                                                   Cameron,R.A., Mahairas,G., Rast,J.P., Martinez,P., Biondi, Swartzell,S., Wallace,J.C., Poustka,A.J., Livingston,B.T.,
                                                                                                                                                                 Strongylocentrotus purpuratus
Eukaryota; Metazoa; Echinodermata; Eleutherozoa;
Echinoidea; Euechinoidea; Echinacea; Echinoida;
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                                                                                          AZ199581 System 599 bp DNA linear GSS 31-AUG-
SP_1039_B2_E12_SP6E Strongylocentrotus purpuratus, purple sea
urchin, sperm genomic BAC library Strongylocentrotus purpuratus
genomic clone Plate=1039 Col=24 Row=J, DNA seguence.
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Class: BAC ends
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Fax: (626) 793-3047
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California Institute of Technology
Pasadena California 91125, USA
Strongylocentrotus purpuratus Eukaryota; Metazoa; Echinodermata; Eleutherozoa;
                               GSS.
Strongylocentrotus purpuratus.
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urchin, sperm genomic BAC library"
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AZ400717 665 bp DNA linear GSS 03-OCT-200 IM0167E11F Mouse 10kb plasmid UUGC1M library Mus musculus genomic clone UUGC1M0167E11 F, DNA sequence.
AZ400717
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Division of Biology 156-29
California Institute of Technology
Pasadena California 91125, USA
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Location/Qualifiers
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Plate: 1039 row: J column: 24
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(626) 793-3047
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VERSION
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Insert Length: 10000 Std Erro
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unpublished (2000)
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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                                                                                                                                                                                                                                                                    purified. The sheared, auaptored into adaptored vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

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                                                                                                                                                                                                                                                                                                                                                                                                                              was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polymucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWDA2 (gi147321141gb|AFT29072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the input agarts and
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/note="Vector: PWD42nv; Purified genomic DNA from M.
musculus C57BL/6J (male) was obtained from the Jack
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/clone="UUGCIM0167E11"
/clone_11b="Mouse 10kb plasmid UUGCIM library"
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/strain="C57BL/6J"
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GSS; genome survey sequence.
GSS; genome nigroviridis.
Tetraodon nigroviridis
Tetraodon nigroviridis
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontidae; Tetraodon.
                                                      Weissenbach, J. Charaterization and repeat analysis of the compact Charaterization and repeat analysis of the compact freshwater pufferfish Tetraodon nigroviridis
Bernot, A.,
Saurin, W. ?
         Roest-Crollius, H., Jaillon, O., Dasilva, C., Bouneau, L., Fisher, C
Bernot, A., Fizames, C., Wincker, P., Brottier, P., Quetler, F.,
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2 (bases 1
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Roest-Crollius, H., Jaillon, O., Dasilva, C., Fizames, C., Fizames, L., Billault, A., Quetier, F., Saurin, W., Bernot, A.
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                                          AAAGACCGACGTCGAGGCAGAGAAGAAGAATACCAGGAGGAGCTCAACTCACTYCTAAA
                                                                                 yGlnGlyThrValAspPhePheAsnLysGluIleArgAspPro--
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/db_xref="taxon:99883"
/clone="163J14"
/clone_lib="G"
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                                                                                                                                                                                                                                                                                          Contact: Marra M/Mouse EST Project
WashU-HHMI Mouse EST Project
Washington University School of Medicinep
4444 Forest Park Parkway, Box 8501, St. Lo
                                                                                                                                                                                                                                                                                                                                                                         Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuque,T. Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M., Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B., Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and Waterston,R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          881
                                                                                                                                                                                                                                   Email: mouseest@watson.wustl.edu
This clone is available royalty free through LLNL;
                                                                                                                                                                                                                                                                 Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          );, mRNA sequence.
AA571652
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                                                                                                                                                                                                            IMAGE Consortium (info@image.llnl.gov)
MGI:561948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus musculus
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                                                                                                                                                                                             quality sequence stop: 469
 //note="Organ: embryo; Vector: pSPORT; Site_1: NotI;
Site_2: SalI; Cloned unidirectionally from mRNA prepared
from 800 blastocysts. primer: SalI(dT):
5'-CGGTCGACCGTCGACCGTTTTTTTTTTTTTTT-3'. cDNAs were
                                                       /clone_lib="Knowles Solter mouse blas
/tissue_type="blastccyst"
/dev_stage="embryo (pre-implantation)
/lab_host="DH10B"
                                                                                                            /organism="Mus musculus"
/strain="B6D2 F1/J"
/db_xref="taxon:10090"
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                                                                                                                                                                                ocation/Qualifiers
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Contact: Shaying Zhao
Department of Eukaryotic Genomics
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US-09-807-459-2 (1-458) x AA571652
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Zhao,S., Nierman,W., Malek,J., Shatsman,S., A Tsegaye,G., Geer,K., Krol,M., Shvartsbeyn,A., Russell,D., de Jong,P. and Fraser,C.M.

Mouse BAC End Sequences from Library RPCI-24 Unpublished (1999)

Other_GSSS: RPCI-24-287H12.TJ
                                                                                                                     Mus musculus
Eukaryota; Metazoa; Chordata;
Eukharyota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
1 (bases 1 to 794)
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RPCI-24-287H12.TV RPCI-24
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Sciurognathi; Muridae;
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e RPCI-24-287H12
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                                                                                                  Levins, M.,
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                                                                                                                                                                                rAsnAspAlaLysAspLeuPheGlu---AsnLysIleGlyGln------
                                                                                                                                                                                                                                                                                                                                                                   uLysGluLysValSerThrAspThrLysAspLeuPheGluAsnLysIleGlyGlnGlyTh 324
                                                                                                                                                                                                                                                                                                                                                                                                                  GGTA---GAGGACATCAAGAAGGACTTTAATAACTCACTTAAGGAA-----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGAATCTTACTAACAGAAACCAAGACCACTCATCATCATCAGAAACCAGCACTCCCA--
----GlyThrValAsp---PheIleAsnAsnGluIleArgAspProSerLysAlaLeuIl 375
                                            AGACACAATAAGGAAAAACCCAAAGTGAGGCAAAGCTGGAGATAGAAACCTTAGGAAAGAA 469
                                                                                                                                                                                                                                                                          rValAspPhePheAsnLysGluIleArgAspProSerLysAlaLeuLysGluLysValSe 344
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Class: BAC ends.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              primer: T7
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2 Medical Center Dr., Rockville, MD 20850, USA
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301 838 0208
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /db_xref="taxon:10090"
/clone="RPCI-24-287H12"
/clone_lib="RPCI-24"
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/strain="C57BL/6J"
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                                                                                                                                                                                                                                                                                                                                                                                                                                Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: |
Plate: 0564 row: C column: 11
Seg primer: CACACAGGAAACAGCTATGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Robert B. University of Utah University of Utah
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AZ766807 698 bp DNA 1M0564C11R Mouse 10kb plasmid UUGC1M 1 Clone UUGC1M0564C11 R, DNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                               Class: plasmid ends
High quality sequence stop:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tel: 801 585 5606
Fax: 801 585 7177
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mmalia; Eutheria;
(bases 1 to 698)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USA
               (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel
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                                                                                                                                                                                     /lab_host="E. Coli strain XL10-Gold, T1-resistant, F
/note="Vector: PWD42nv; Purified genomic DNA from M.
musculus C57BL/6J (male) was obtained from the Jack
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electrophoresis.
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/clone="UUGC1M0564C11"
/clone_11b="Mouse 10kb plasmid UUGC1M library"
                                                                                                                                                                                                                                                                                                                      /organism="Mus musculus"
/strain="C57BL/6J"
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ACATCCAGGTAATGCAGGACACAATGAGAAGACCAAAT------CTACGGATAATA 428
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                Strongylocentrotus purpuratus.
Strongylocentrotus purpuratus
Eukaryota; Metazoa; Echinodermata;
                                                                        AZ152840 324 bp DNA linear G SP_0034_B2_G06_SP6E Strongylocentrotus purpuratus, pu urchin, sperm genomic BAC library Strongylocentrotus genomic clone Plate=34 Col=12 Row=N, DNA sequence. AZ152840 AZ152840.1 GI:8304741 GSS
  Echinoidea;
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  Euechinoidea; Echinacea;
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Mismatches:
Indels:
Gaps:
Eleutherozoa;
a; Echinoida;
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A2988471 642 bp DNA linear GSS 27 2M0271021F Mouse 10kb plasmid UUGC2M library Mus musculus clone UUGC2M0271021 F, DNA sequence.
AZ988471
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Seg primer: SP6
Class: BAC ends
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California Institute of Technology
Pasadena California 91125, USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tel: (626) 395-8421 Fax: (626) 793-3047
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         additional resources
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ,G.A., Ettensohn,C.A.,
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/clone="plate=34 Col=12 Row=N"
/clone_lib="Strongylocentrotus purpuratus,
/clone_lib="Str
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                                                                                         225 GlnHisIleThrSerSerTyrLysAspTyrMetAspThrGlnIleProAlaLeuProLys 244
                                                19 AAGAATCTTACTAACAGAAACCAAGACCACTCACCATCATCAGAACCCAGCACTCCC--- 75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error:
Plate: 0271 row: 0 column: 21
Seq primer: CGTTCTAAAACGACGGCCAGT
Class: plasmid ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Robert B. Weiss
University of Utah Genome Center
University of Utah
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dunn, D., Aoyagi, A., Barber, M., Beacorn, T., Duval, B., Hamil, C., Islam, H., Longacre, S., Mahmoud, M., Meenen, E., Pedersen, T., Reilly, M., Rose, M., Rose, R., Stokes, R., Tingey, A., von Niederhausern, A. and Wright, D., Welss, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tel: 801 585 5606
Fax: 801 585 7177
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       308,
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Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                    adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (gil4732.14/gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The
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/note="Vector: PWD42nv; Purified genomic DNA from M.
musculus C57BL/6J (female) was obtained from the Jackson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /db_xref="taxon:10090"
/clone="UUGC2M0271021"
/clone_lib="Mouse 10kb plasmid UUGC2M library"
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/strain="C57BL/6J"
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Db 76	ACTTCGCCCAGTCCAGGCAC 96
Оу 265	Va
Db 97	CCCAAAACACCC
Qy 285	ValPheIleProThrLysLysPhePheAsn
Db 148	:::
Оу 302	LysAlaLeuLysGluLysValSerThrAspThrLysAspLeuF
Db 208	0
Qy 318	_ ~
Db 268	₹-
Оу 338	5
Db 313	CTAAAAAGGGAAGTAGACACAATAAAGAAAACCCCAAAGTGAGGCAACGCTGGAGATA 369
Оу 353	AsnLysIleGlyGlnGlyThrValAspPheIleAsnAsnGluI
Db 370	GAAACCCTAGGAACCATAGGAAAATCTGGAACCATAGATGCCAGCATCAGCAACAGAATA 429
Qу 368	ArgAspProSerLysAlaLeuIleArgLysValSerThrGlyAlaGluAspLeu
Db 430	CAAGAGATGGAAGAGAATCTCAGGTGCAGAAGA
Qу 388	AsnLysIleGlyGlnGlyThrValAspPheIleAsnAsnGluIleArgAspProSe
Db 475	AACATCGGCACAACAATCAAAGAAAATACAAAA 507
Оу 408	AlaLeuIleArgLysValTyrThrGluAlaAspAspLeuPheGlu
Db 508	TCCAAAAAGATCCTAACTCAA
Оу 428	GlyThrValAspPheIleAsnLysGluIleArgAspProSe
Db 529	AACATCCAGGAAATCCAGGACACAATGAGAAGACCAAACCTACGGATAATACG
Оу 448	ValSerThrGluAlaAspAsnLeuLeu 456
Db 586	GATGAAAATGAAGATTTTC
RESULT 17 BB230024 LOCUS DEFINITION	
ACCESSION VERSION KEYWORDS SOURCE	BB230024 BB230024.2 GI:16354349 EST. house mouse.
	Eukaryota; Meta Mammalia; Euthe
AUTHORS	. I (bases I to 'vo') Arakawa.T., Carninci,P., Fukuda,S., Furuno,M., Hanagaki,T., Hara.A., Hiramoto,K., Hori,F., Ishii,Y., Ito,M., Kawai,J., Konno,H., Kouda
	<pre>,M., Koya,S., Matsuyama,T., Miyazaki,A., Nomura,K., Ohno,M., Okazaki,Y., Okido,T., Salto,R., Sakai,C., Sakai,K., Sano,H., Sasaki ,D., Shibata,K., Shinagawa,A., Shiraki,T., Sogabe,Y., Suzuki,H., Tagami,M., Tagawa,A., Takahashi,F., Takeda,Y., Tanaka,T., Toya,T., Muramatsu,M. and Hayashizaki,Y.</pre>
TITLE JOURNAL	RIKEN Mouse ESTS (Arakawa, T., et al. 2001) Unpublished (2001)
COMMENT	On Jul 3, 2000 this sequence version replaced g1:8900669. Contact: Yoshihide Hayashizaki
	Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center(GSC), Yokohama Institute

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Query Match:
DB:
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URL:http://genome.gsc.riken.go.jp/
Carninci,P., Shibata,Y., Hayatsu,N., Sugahara,Y., Shibata,K., Itoh
,M., Konno,H., Okazaki,Y., Muramatsu,M. and Hayashizaki,Y.
Normalization and subtraction of cap-trapper-selected cDNAs to
prepare full-length cDNA libraries for rapid discovery of new
genes. Genome Res. 10 (10), 1617-1630 (2000)
wagi,K., Fujiwake,S., Inoue,K., Togawa,Y., Izawa,M., Ohara,E.,
Watahiki,M., Yoneda,Y., Ishikawa,T., Ozawa,K., Tanaka,T., Matsuura
,S., Kawai,J., Okazaki,Y., Muramatsu,M., Inoue,Y., Kira,A. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Encyclopedia Project of Genome Exploration Research Group in Rigenomic Sciences Center and Genome Science Laboratory in RIKEN Division of Experimental Animal Research in Riken contributed to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         encyclopedia: real-time sequence clustering for construction of a nonredundant cDNA library. Genome Res. . 11 (2), 281-289 (2001) Kondo,S., Shinagawa,A., Saito,T., Kiyosawa,H., Yamanaka,I., Aizawa,K., Fukuda,S., Hara,A., Itoh,M., Kawai,J., Shibata,K. and
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Konno,H., Fukunishi,Y., Shibata,K., Itoh,M., Carninci,P., Sug,Y. and Hayashizaki,Y.
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Tel: 81-45-503-9222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Please visit our web site (http://genome.gsc.riken.go.jp/) for further details.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Computational Analysis of Full-Length Mouse cDNAs Compared with duman Genome Sequences Mamm. Genome. 12, 673-677 (2001)
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                                                                                                                                                                                                                                                                                                                          /note="Site_1: Sall; Site_2: BamHI; cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to prepare mouse tissues. 1st strand cDNA was
                                                                                                                                                                                                                                                                                                                                                                                                                              prepared by using trehalose thermo-activated reverse transcriptase and subsequently enriched for full-length by cap-trapper, cDNA went through one round of normalization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /clone_lib="RIKEN full-length enriched, 3 days neonate
thymus"
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/clone="A630024K10"
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                                Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Lothar Hennighausen Ph.D.,
cDNA Library Preparation: Life Technologies, I
cDNA Library Arrayed by: The I.M.A.G.E. Consor
                                                                                                                                                            Submitted (19-DEC-2001) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
DNA Sequencing by: Baylor College of Medicine Human Genome Sequencing Center
                                                                                                          NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
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                                                                                                                                                                                                                                                                                                                Mus musculus
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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                                                                                  AlaGlyTyrValAspThrProTrpTyrLysLysTrpTyrMetLysLeuLysAsnPheMet
                                                                                                                                  -----AAGTCTCATAAGAAGACTAAAAGAAGAAGTCGCAGGGACTCTGGAAGCAGTCCAA
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Contact: amg@bcm.tmc.edu
Gunaratne, P.H., Garcla, A.M., Lu, X.,
Gunaratne, P.K., Carcla, A.M., Lu, X.,
Yoon, V.S., Kowis, C.R., Lawrence, S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Clone distribution: MGC clone distribution information can be for through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 45 Row: Collumn: 1
This clone was selected for full length sequencing because it passed the following selection criteria: Hexamer frequency ORF analysis, GenomeScan gene prediction
This clone has the following problem: frame shifted.
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old, gross tissue."
/clone_lib="NCI_CGAP_Mam5"
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157 c 227 g 203 t
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/db_xref="taxon:10090"
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Martin, R.G., Muzny,
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                                                                                                                                              High
                                                                                                                                                                         Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: 0
Plate: 0082 row: p column: 07
Seg primer: CACACAGGAAACAGCTATGACC
                                                                                                                                                                                                                                                                                                                                                                                       Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus 1 (bases 1 to 721)

Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C., Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von Niederhausern,A. and Wright,D.,Weiss,R.
                                                                                                                                                                                                                                         Tel: 801 585 5606
Fax: 801 585 7177
                                                                                                                                                                                                                                                                                        University of Utah
University of Utah
Rm. 308, Biomedical
                                                                                                                                                             Class: plasmid ends
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Mammalia; Eutheria;
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             /clone_lib="Mouse 10kb plasmid
/sex="Male"
                                             /db_xref="taxon:10090"
/clone="UUGC2M0082P07"
                                                                             /organism="Mus musculus"
/strain="C57BL/6J"
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/lab_host="E.
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PheIleAsnAsnGluIleArgAspProSerLysAlaLeuIleArgLysValTyrThrGlu 416
                                                                                                                                                GAGATGGAAGAAGAATC-------GCAGGTGCAGAAGATTCCATAGAGGAC
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                                                                                                                                                                                                                                                                                                                                         Candida tropicalis and Yarrowia lipolytica. Genomic inserts of 3:5 kb were prepared and both extremities were sequenced. See keywords for description of this sequence and for the sequence of the other extremity of this insert.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                      exiguus, Saccharomyces servazzii, Zygosaccharomyces rouxii, Saccharomyces kluyveri, Kluyveromyces thermotolerans, Kluyveromyces lactis var. lactis, Kluyveromyces marxianus var. marxianus, Pichia angusta, Debaryomyces hansenii var. hansenii, Pichia sorbitophila, Candida tropicalis and Yarrowia lipolytica. Genomic inserts of 3 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Submitted (07-SEP-2000) Genoscope - Centre National de Sequencage, 2 rue Gaston Cremieux, CP 5706, 91057 EVRY cedex, FRANCE. (E-mail: seqrefdgenoscope.cns.fr - Web: www.genoscope.cns.fr)
This GSS is part of a random genomic sequencing program of thirteen yeast species: Saccharomyces bayanus var. uvarum, Saccharomyces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Souciet J.L., Aigle, M., Artiguenave, F., Blandin, G., Bolotin-Fukuhara, M., Bon, E., Brottier, P., Casaregola, S., de-Montigny, J., Dujon, B., Durrens, P., Lepingle, A., Llorente, B., Malpertuy, A., Neuveglise, C., Ozier-Kalogeropoulos, O., Potier, S., Saurin, W., Tekaia, F., Toffano-Nioche, C., Wesolowski-Louvel, M., Wincker, P. and Weissenbach, J. Genomic exploration of the hemiascomycetous yeasts: 1. A set of yeast species for molecular evolution studies
FEBS Lett. 487 (1), 3-12 (2000)
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Saccharomycetales; Saccharomycetaceae; Saccharomyces.
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/clone="ASOAA012F08"
/clone_lib="ASOAA"
/note="end : T3"
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/note="similar to Saccharomyces cerevisiae ORF YFL008w SMC1; chromosome segregation protein ]"
                  /evidence=not_experimental
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                                                                                                                                                                                                                                                  /variety="uvarum"
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                                                                                                                           TATGAAAGTCATTCCGGTGAATTAATGAGACAACAATCGAAGGAATTACAACAATTG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCAGGGAGGTCGAAAACAGTGTTTCGCTATTGAATTCCGATATA------GCA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerValSerArgLeuGlnHisIleThrSerSerTyrLys-------AspTyr 234
                                                                                                                                            LysValSerThrGlyAlaGluAspLeuPheGluAsnLysIleGlyGlnGlyThrValAsp 396
                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTTTGAGAACTCAGGTAACTCAACAAAAGCGTTCCTTGGATGAGAATAAATTAGAGATA 448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AlaLeuLysGluLysValSerAsnAspAlaLysAspLeuPheGluAsnLysIleGly---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GluLysValSerThrAspThrLysAspLeuPheGluAsnLysIleGly------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCGGGGGACACTAATAATAGATGGGACAAAGAAGAGTATCAAAGCTTAATGTCCTTGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PheIleProThrLysLysPhePheAsnLysGluIleArgGluProSerLysAlaLeuLys 305
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGTGTATTGCATTCTCAAAAAGCAACGTGCAGGTATGCGTCCTTCATACCACTTGACACT 916
                                                                                                                                                                                                                                                                                 PheIleAsnAsnGluIleArgAspProSerLysAlaLeuIleArgLysValTyrThrGlu 416
                                                                                                                                                                                                                                                                                                            AAACTA------GAACATTTGGAAAAGACTAAG-----
                                                                                                                                                                                                                                                                                                                                                                          AAATACCATAATGACCTGATAGATAATGAGATTCAACCAAAGATAACCGAATTGGAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -----GlnGlyThrValAspPhePheAsnLysGluIleArgAspProSerLys 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGTTAGTTACGATCGAAGGGGCTTTAATTCATAAAGCCGGTTTAATGACAGGTGGTATA 676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuLeuAlaThrValAlaGlyTyrVal---AspThrProTrpTyrLysLysTrpTyrMet 275
CNSO7C18
T3 end of clone xBC0AA00
of Debaryomyces hansenii
AL438594
AL438594.1 GI:12222007
                                                                                                                                                                                                                    AlaAspAspLeuPheGluAsnLysIleGlyGlnGlyThrValAspPheIleAsnLysGlu 436
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XBCOAA001D03 of library XBCOAA from strain CBS 767
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No.:
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                           192 ThrGlyLeuPheGlyTrpGlyIleLysArgAlaLeuLysGlnIleIleArgSerAsnLeu 211
                                                                                       172 LysThrTyrThrAsnValAspGluPheGlyAlaSerPhePheAsnLysLeuSerPheThr 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AACGGATCG------GATGTGAAAGAAGAAGCTTCCGAGACAGTAAAATCTGAGGTA
                                                         AAGACTCTTCAGAGAATTGACGAA-
                                                                                                                                                                                                                                              Scores:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lepingle, A., Casaregola, S., Neuveglise, C., Bon, E., Nguy Artiguenave, F., Wincker, P. and Gaillardin, C. Genomic exploration of the hemiascomycetous yeasts: 14 Debaryomyces hansenii var. hansenii FEBS Lett. 487 (1), 82-86 (2000)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Debaryomyces hansenii.
Debaryomyces hansenii
Eukaryota; Fungl; Ascomycota; Saccharomycotina; Saccharomycetes;
Saccharomycetales; Saccharomycetaceae; Debaryomyces.
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Souciet, J.L., Aigle, M., Artiguenave, F.,
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                                                                                                                       (1-458)
                                                                                                                                                                                                                                                                                            268
                                                                                                                                                                                                                                                                                                    complement(<6. .>1115)
/note-"similar to Saccharomyces
weak similarity to spindle pole
/evidence-not_experimental
                                                                                                                                                                                                                                                                                                                                                                  /note="end :
                                                                                                                                                                                                                                                                                                                                                                                /clone="xBC0AA001D03"
/clone_lib="xBC0AA"
                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Debaryomyces
/strain="CBS 767"
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                                                                                                                                                                     1M0216006R Mouse 10kb plasmid UUGC1M 1ibrary Mus clone UUGC1M0216006 R, DNA sequence. AZ431579
AZ431579.1 GI:10555592
GSS.
Mus musculus

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleoston

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleoston

Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; N

1 (bases 1 to 642)

Dunn, D., Aoyaqi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C.,

Junn,D., Aoyaqi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C.,

Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reil

,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von Niederhausern,

and Wright,D., Weiss,R.
                                                                                                                                                   house mouse.
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Percent Similarity:
Best Local Similarity:
Query Match:
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                                       GluAsnLysIleGlyGlnGlyThrValAspPhePheAsnLysGluIleArgAspProSer 336
                                                                                                                                                                         ATGATGGTAGAGGACATCAAGAAGAACTTTAATAACTCACTTAAAGAAATACAGGAGGAC
                                                                                                                                                                                                AsnArgValPheIleProThrLysLysPhePheAsn-----LysGluIleArgGluPro
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GAAAACATGACCAAACAG-----
                                                                                   ACTGCTAAACAGATAGAAGATCTTAAAGAGGAAGAACGAAAATCCCCTTAAAGAATTTCAG
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Email: ddunn@genetics.utah.edu
Fanorh: 10000 Std Error:
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Fax: 801 585 7177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Robert B. Weiss
University of Utah Genome Center
University of Utah
Rm. 308, Biomedical Polymers Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Class: plasmid ends
High quality sequence stop:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Seq primer: CACACAGGAAACAGCTATGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (gil4732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coli xL10-Gold (Stratagene) cells and selected for ampicillin resistance.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="UUGC1M0216006"
/clone_lib="Mouse 10kb plasmid UUGC1M library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Laboratory Mouse DNA Resource
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                                                                                                                                                                                                                                                                                 Contact: Shaying Zhao
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Dr., Rockville,
Tel: 301 838 0200
Fax: 301 838 0208
                                                                                                                                                                                    Clones are derived from the mouse BAC library RPCI-24. For BAC library availability, please contact Pieter de Jong (pdejong@mail.cho.org). Clones may be purchased from BACPAC Resources (http://www.chori.org/bacpac/orderingframe.htm). BAC page: http://www.tigr.org/tdb/bac_ends/mouse/bac_end_intro.html Plate: 149 row: N column: 17
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Tsegaye,G., Geer,K., Krol,M., Shvartsbeyn,A.,
Russell,D., de Jong,P. and Fraser,C.M.
Mouse BAC End Sequences from Library RPCI-24
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RPCI-24-149N17.TJ RPCI-24 Mus
                                                                                                                                                                                                                                                                     Fax: 301 838 0208
Email: szhao@tigr.org
                                                                                                                                                                                                                                                                                                                                                                       Unpublished (1999)
Other_GSSs: RPCI-24-149N17.TV
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Mammalia; Eutheria; Rodentia;
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/cell_type="Spleen/Brain"
/note="Vector: pTARBAC1; Site_1: Ba
RPCI-24 Mouse BAC Library produced
                                                        /db_xref="taxon:10090"
/clone="RPCI-24-149N17"
/clone_11b="RPCI-24"
                                             /sex="Male"
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US-09-807-459-2 (1-458) x AZ733090
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                 AZ462925 478 bp D
1M0271A02R Mouse 10kb plasmid UUGC1M
clone UUGC1M0271A02 R, DNA sequence.
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                                                       ThrGluHisSerValSerArgLeuGlnHisIleThrSerSerTyrLysAspTyrMetAsp
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ACAAGCTCCAGCCAGAGTCAGTTATATCATCTAACACCAGAGATGACCAAATGGTGAAAG
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Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: 0
Plate: 0271 row: A column: 02
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Class: plasmid ends
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Contact: Robert B.
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,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von Niederhausern,A.
and Wright,D.,Weiss,R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mouse
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end repaired with T4 DNA polymerase and T4 polymucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (gil4732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and present the property of the control 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coli xIJO-Gold (Stratagene) cells and selected for amplcillin resistance."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note="Vector: PWD42nv; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Biomedical
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/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="UUGCIM0271A02"
/clone_lib="Mouse 10kb plasmid UUGCIM library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /lab_host="E. Coli strain XL10-Gold, T1-resistant,
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                                                                                                                                                                                                                                                                                                                                                                                                                               4444 Forest Park Parkway,
Tel: 314 286 1800
Fax: 314 286 1810
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Plasmodium falciparum 3D7.

Plasmodium falciparum 3D7.
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Library was constructed by R. Haywood. DNA sequencing by:
Library was constructed by R. Haywood. End sequencing to information
Washington University Genome Sequencing Center For information
obtaining a clone please contact: L. David Sibley
(sibley@borcim.wustl.edu), Washington University
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Washington University School of Medicine
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Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium 1 (bases 1 to 532)
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/dev_stage="gametocyte (stage III-V)"
/lab_host="DH10B (GeneHog, Invitrogen, Inc.)"
/note="Vector: pBHuescript SK plus; Site_1: EcoRI; Site_2:
XhoI; The library was constructed by R Haywood. cDNAs were synthesized from ganetocyte poly(A) + RNA by oligo d(T) priming, size-selected and directionally cloned into the
                                                                                                                                       library"
                                                                                                                                                            /clone_lib="Plasmodium falciparum 3D7
                                                                                                                                                                               /organism="Plasmodium falciparum
/db_xref="taxon:36329"
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                                                                                                                                                AZ944493
AZ944493.1 GI:13808782
GSS.
Dunn,D., Aoyagi,A., Barber,M., Beacorn,T.,
Islam,H., Longacre,S., Mahmoud,M., Meenen,I
,M., Rose,M., Rose,R., Stokes,R., Tingey,A
                                                  Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Rodentia; 1 (bases 1 to 596)
                                                                                                            Mus musculus
                                                                                                                                                                                                     2M0205C06R Mouse 10kb plasmid UUGC2M library Mus musculus clone UUGC2M0205C06 R, DNA sequence.
                                                                                                                               house mouse.
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                                                                                                GlyTyrValAspThrProTrpTyrLysLysTrpTyrMetLysLeuLysAsnPheMetVal
                                                                                                                                                                                                                                 AAACTTAAGAATCTTACTAACAGAAACCAAGACCACTCACCATCATCAGAACCCAGCACT
                                                                                                                                                                                                                                                                ArgLeuGlnH1sIleThrSerSerTyrLysAspTyrMetAspThrGlnIleProAlaLeu
  ATGATGGTA---GAGGACATCAAGAAGGACTTTAATAACTCACTTAAAGAAATACCGGAG
                                  AsnArgValPheIleProThrLysLysPhePheAsnLysGluIleArgGlu---ProSer 301
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Insert Length: 10000 Std Error:
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University of Utah
Rm. 308, Biomedical
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (gil4732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            92
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through 0.005 inch orifice at constant velocity. The sheared DNA was blunt end repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /lab_host="E. coli strain XL10-Gold, T1-resistant, /note="Vector: PWD42nv; Purified genomic DNA from musculus C57BL/6J (female) was obtained from the
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/clone="UUGC2M0205C06"
/clone_lib="Mouse 10kb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Mus musculus"
/strain="C57BL/6J"
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Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Jane Carlton
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         /dev_stage="Asexual blood stages"
/lab_host="E. coli XL-1 Blue"
/note="Vector: pAD-GAL4; At 20-25% parasitemia, blood with every mice infected with py17xL collected from BALB/CByJ mice infected with py17xL parasites, and leukocytes removed by passage over microcrystalline cellulose collumns. Total RNA was isolated using the guantdinium isothiocyanate method, as mRNA isolated using oligo(dT)-cellulose chromatography. First strand cDNA synthesis was completed using a 50-bar
primer and reverse transcriptase in the presence
                                                                                                                                                                                             /db_xref="taxon:73239"
/clone="PYCPA68"
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                                                                                                                                                                                                                                                                                                                                                               ArgAspProSerLysAlaLeuIleArgLysValTyrThrGluAlaAspAspLeuPheGlu 422
                                                                                                                                                                                                                                                                                                                                                                                                   TCTGATGTAGTTAAAGAAAAAGTA-----ATTGAAACTATTTTTAATTCT---
                                                                                                                                                                                                                                                                                                                                                                                                                                  ---AspLeuPheGluAsnLysIleGlyGlnGlyThrValAspPheIleAsnAsnGluIle
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                                                                               DNA sequence.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
               Mus musculus
                                                                 BH126086.1 GI:14969598
                                  house mouse.
                                                                                                                                                                                                                                 ProSerLysAlaLeuIleArgLys 447
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                               ThraspThrLysAspLeuPheGlu---AsnLysIleGlyGlnGlyThrValAspPhePhe 328
                                                                                                                                    GATTTANAATCATATCTCATGATGCTGGTAGAGGACATCAAGAAGGACTTTAATAACTCA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Dr., Rockville,
Tel: 301 838 0200
Fax: 301 838 0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Zhao, S., Nierman, W., Malek, J., Shatsman, S., Akinret, B., Levin Tsegaye, G., Geer, K., Krol, M., Shvartsbeyn, A., Gebregeorgis, E. Russell, D., de Jong, P. and Fraser, C.M.
Mouse BAC End Sequences from Library RPCI-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unpublished (1999)
Other_GSSs: RPCI-24-289K13.TV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /cell_type="Spleen/Brain"
/note="Vector: pTARBAC1; Site_1: BamH1; Site_2: BamH1;
/note="Vector: pTARBAC1; Site_1: BamH1; Site_2: BamH1;
RPCI-24 Mouse BAC Library produced by Pleter de Jong. The
library was cloned in the pTARBAC1 cloning vector at the
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/clone="RPCI-24-289K13"
/clone_lib="RPCI-24"
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ArgAspProSerLysAlaLeuIleArgLysValSerThrGlyAlaGluAspLeuPheGlu
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Contact: Jim Brandle
Genomics and Biotechnology
Agriculture and Agri-Food Canada - SCI
1391 Sandford St., London, Ontario, CJ
Tel: 519 457 1470
Fax: 519 457 3997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Asn 388
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Brandle, J.E., Richman, A.,
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                                                                                                                                                                                                           /clone_lib="Stevia field grown leaf cDNA"
/tissue_type="leaf"
/tissue_type="leaf"
/dev_stage="field grown, mid-size"
/dev_stage="field grown, mid-size"
/lab_host="E. coli strain XLOLR"
/lab_host="E. coli strain XLOLR"
/note="vector: pBK-CMV; Site_1: EcoRI; Site_2: XhoI; This cDNA library was constructed from polyA+ enriched mRNA cDNA library was constructed from polyA+ enriched mRNA from field grown leaves. Mid-size actively growing leaves were collected and pooled from several plants and frozen immediately after harvesting in liquid nitrogen. The cDNA was prepared using an XhoI-poly(dT) linker-primer. An EcoRI adapter was ligated to the blunt end cDNA and the products were digested with EcoRI and XhoI enabling
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                                                                                                                       products were digested with EcoRI and xnow enduring directional cloning into the lambda ZAP Express vector. The library was amplified using the host strain XLI-Blue MRF'. Mass excision of the library was performed to
                                                    obtain pBK-CMV phagemid clones in the host strain XLOLR. Single pass DNA sequencing was performed using the T3 promoter primer: 5' ATTAACCCTCACTAAAGGGA 3'. This library
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/strain="751/1501"
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Zhao, S., Nierman, W., Malek, J., Shatsman, S., Al
Tsegaye, G., Geer, K., Krol, M., Shvartsbeyn, A.,
Russell, D., de Jong, P. and Fraser, C.M.
Mouse BAC End Sequences from Library RPCI-24
Unpublished (1999)
Other, GSSS: RPCI-24-242M13.TV
                                                                                 Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalla; Eutheria; Rodentia; Sciurognathi; Muridae;
1 (bases 1 to 791)
                                                                                                                                                                                                      BH047254 791 bp DNA linear GSS 17-JUL-2001 RPCI-24-242M13.TJ RPCI-24 Mus musculus genomic clone RPCI-24-242M13
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Percent Similarity:
Best Local Similarity:
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CAAGACATAAAAAGGGAAGTAGACACAATAAAGAAAATCCAAAGTGAGGCAACGCTGGAG
                                         ArgAspProSerLysAlaLeuLys···--GluLysValSerAsnAspAlaLysAspLeu
                                                                                                                            LysAspLeuPheGluAsnLysIleGlyGlnGlyThrValAspPhePheAsnLysGluIle
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                                                                                                                                                                                                                    IleArgGluProSer---
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Email: szhaoetigr.org
Clones are derived from the mouse BAC library RPCI-24. For BAC library availability, please contact Pieter de Jong (pdejong@mail.cho.org). Clones may be purchased from BACPAC Resources (http://www.chori.org/bacpac/orderingframe.htm). BAC & page: http://www.tigr.org/tdb/bac_ends/mouse/bac_end_intro.html Plate: 242 row: M column: 13
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Class: BAC ends
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The Institute for Genomic Research
9712 Medical Center Dr., Rockville.
Tel: 301 838 0200
Fax: 301 838 0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (1-458) x BH047254
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/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="RPCI-24-242M13"
/clone_lib="RPCI-24"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /sex="Male"
/cell_type="Spleen/Brain"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 pProSerLysAlaLeuIleArgLysValSerThrGluAlaAspAsnLeu 455
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              nLysIleGlyGlnGlyThrValAspPheIleAsnAsnGluIleArgAspProSerLysAl 408
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Dunn, D., Aoyagi, A., Barber, M., Beacorn, T., Duval, B., Hamil, C., Islam, H., Longacre, S., Mahmoud, M., Meenen, E., Pedersen, T., Reilly, M., Rose, M., Rose, R., Stokes, R., Tingey, A., von Niederhausern, A. and Wright, D., Wells, R.
                                                                                                                                                                                                                                                                                                                                                                                                                          Seq primer: CGTTGTAAAACGACGGCCAGT
Class: plasmid ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Erro
Plate: 0208 row: J column: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       University of Utah Genome University of Utah
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unpublished (2000)
Contact: Robert B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mouse whole genome scaffolding with paired end
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A39 bp DNA linear 2M0208J13F Mouse 10kb plasmid UUGC2M library Mus n clone UUGC2M0208J13 F, DNA sequence.
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(http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA only inch orifical with T4 DNA polymerase and T4
                                                                                                                   /lab_host="E. coli strain XL10-Gold, T1-resistant, /note="Vector: PWD42nv; Purified genomic DNA from I musculus C57BL/6J (female) was obtained from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Biomedical
                                                                                                    Laboratory Mouse DNA Resource
                                                                                                                                                                                                                                               /db_xref="taxon:10090"
/clone="UUGC2M0208J13"
                                                                                                                                                                                                                                                                                               /organism="Mus musculus"
/strain="C57BL/6J"
                                                                                                                                                                                                    /sex="Female"
                                                                                                                                                                                                                      /clone_lib="Mouse 10kb plasmid UUGC2M library"
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VERSION
KEYWORDS
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ORIGIN
                                                                  REFERENCE
                                                                                                                                                       SOURCE
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                                                                                                                                                                                                                                                                                                                          RESULT 32
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                                                                                                                                                                                                                                                                                                                                                                  98
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ---GluLysValSerAsnAspAlaLysAspLeuPheGluAsnLysIleGlyGln-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlnGlyThrValAspPhePheAsnLysGluIleArgAspProSerLysAlaLeuLys---
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -----AAGAAGGACTTTAATAACTTACTTAAAGAAATACAGAACACTGGTAAAGAGTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ProThrLysLysPhePheAsn------LysGluIleArgGluProSerLysAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAAAAGTTAGAACTGGAGTTAAAAACATATCACATGATGATGGTAGAGGACATC----
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                                                                                                                                                                                                                                                                                                                                                                                                   PheIleAsnAsnGluIleArgAspProSerLysAlaLeuIleArgLysValTyrThrGlu 416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----LysGluLysValSerThrAspThrLysAspLeuPheGluAsnLysIleGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ----TTTAACAAAACCATACAAGACTTAAAAAGGGAAGTAGACACA
Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., D
Islam,H., Longacre,S., Mahmoud,M., Meenen,E.,
,M., Rose,M., Rose,R., Stokes,R., Tingey,A.,
                                                                                                                                                                                                                                    AZ344512 503 bp DNA li
1M0078M05R Mouse 10kb plasmid UUGC1M library
clone UUGC1M0078M05 R, DNA sequence.
                                                                                                                               Mus musculus
                                                                                                                                                                           GSS
                                                                                     Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                               AZ344512.1
                                                                                                                                                     louse mouse
                                                                                                                                                                                                                                                                                                                                                                  ATCGGCAAAACAATCAAAGAA-----AAGGCAAAATGCAAAAAGATCTTAACTCAG
                                                             ammalia; Eutheria; (bases 1 to 503)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWHD42 (gi14732114/gb1AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coil xx10-Gold (Stratagene) cells and selected for ampicillin resistance."
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                                                                                     Chordata;
Rodentia;
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Matches:
Conservative:
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                                                                                   Craniata; Veri
Sciurognathi;
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Meenen, E., Peu
                                                                                                           Vertebrata; Euteleostomi;
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                        Duval,B., Hamil,C
E., Pedersen,T., Re
                                                                                                                                                                                                                                                                              linear
                                                                                        Muridae;
                                                                                                                                                                                                                                                          musculus genomic
                                                                                                                                                                                                                                                                              GSS
                                                                                        Murinae;
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340
                                                                                                                                      412
                                  283
                                                                   394
                                                                                                     263
                                                                                                                                                                       243
                                                                                                                                                                                                        472 AAATGTGAGAATCTTACTAACAGAAAACAGGACCACTCACCATCATCAGAACCCAGCATT
                                                                                                                                                                                                                                            223
ATGATGGTA - - - GAGGACACCAAGAAGGACTTAAATAACTCACTTAAAGAAATACAGGAG
                             AsnArgValPheIleProThrLysLysPhePheAsn-----LysGluIleArgGlu
                                                                 GGGCACCCCAACACCCC----AAAAAGCTAGACCTGGATTTAAAAAGCATATCTCATG
                                                                                     GlyTyrValAspThrProTrpTyrLysLysTrpTyrMetLysLeuLysAsnPheMetVal
                                                                                                                                                                     ProLysPheAlaLysArgPheSerLeuMetValValGlnArgLeuLeuAlaThrValAla
                                                                                                                                                                                                                                        ArgLeuGlnHisIleThrSerSerTyrLysAspTyrMetAspThrGlnIleProAlaLeu
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Insert Length: 10000 Std Error: (
Plate: 0078 row: M column: 05
Seq primer: CACACAGGAAACAGCTATGACC
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Fax: 801 585 7177
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished (2000)
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Location/Qualifiers
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Mouse whole genome
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Laboratory Mouse DNA Resource
(http://www.jax.org/resources/documents/dnares/). The DNA
was hydrodynamically sheared by repeated passage through a
0.005 inch orifice at constant velocity. The sheared DNA
was blunt end-repaired with T4 DNA polymerase and T4
polynucleotide kinase. Adaptor oligonucleotides were
ligated to the blunt ends in high molar excess. The
adaptored DNA was purified and size-selected for a 9.5 to
10.5 kb range using preparative agarose gel
electrophoresis. Vector DNA was prepared from a derivative
of pWD42 (gil4732114 jgb|AFI29072 l), a copy-number
inducible derivative of plasmid R1. The vector was ligated
with adaptors complementary to the insert adaptors and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      plasmid ends
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   purified. The sheared, adaptored mouse DNA was annealed to
adaptored vector DNA, and transformed into
chemically-competent E. coli xLIO-Gold (Stratagene) cells
and selected for amplcillin resistance."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note-"Vector: PWD42nv; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="UUGC1M0078M05"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /lab_host="E. Coli strain XL10-Gold, T1-resistant,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /clone_lib="Mouse 10kb plasmid UUGC1M library"
                                                                                                                                                                                                                                                                                                              0.152
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           library availability, please contact Pieter de Jong (pdejong@mail.cho.org). Clones may be purchased from BACPAC Resources (http://www.chori.org/bacpac/orderingframe.htm). page: http://www.tigr.org/tdb/bac_ends/mouse/bac_end_intro.Plate: 214 row: L column: 9
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The Institute for Genomic Researc
9712 Medical Center Dr., Rockvill
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Other_GSSs: RPCI-23-214L9.TVB
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,B., Levins,M., Mcgann,S., Tsegaye,G., Geer,K., Krol,M., de Jong,P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae;
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/lab_host="DH10B"
/lab_host="DH10B"
/note="Organ: Kidney/Brain; Vector: pBACe3.6; Site_1:
/note="Organ: Kidney/Brain; Vector: pBACe3.6; Site_1:
ECORI; Site_2: ECORI; Female C57BL/6J mouse kidney and/or
brain genomic DNA was isolated and partially digested
with a combination of EcoRI and EcoRI Methylase. Size
selected DNA was cloned into the pBACe3.6 vector at the
ECORI sites. The ligation products were transformed into
DH10B electrocompetent cells (BRL Life Technologies).

102 c 109 g 243 t
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/clone="RPCI-23-214L9"
/clone_lib="RPCI-23"
                                                                                                                                                                                                                                                                                                                                                            /organism="Mus musculus"
/strain="C57BL/6J"
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                                                                                                     Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Dr., Rockville,
                                 Email: bjloftus@tigr.org Clones are derived from
                                                                    9712 Medical Center Dr., Tel: 301 838 0208 Fax: 301 838 3543
                                                                                                                                                          Contact: Brendan J Loftus
                                                                                                                                                                             Unpublished (2000)
                                                                                                                                                                                           l (bases 1 to 869)
Loftus, B., Van Aken, S. and Fraser, C.
Determination of clone end sequences
HM1:IMSS sheared DNA library
                                                                                                                                                                                                                                                                   Entamoeba histolytica 
Eukaryota; Entamoebidae;
                                                                                                                                                                                                                                                                                                    AZ679969.1 GI:1181711
GSS.
Entamoeba histolytica.
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ENTFZ06TR Entamoeba histolytica
                                                                                                                                                                                                                                                                                                                                                                          genomic, DNA sequence
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M13-Reverse
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                                                   ----CAATCATCTATAGATTCTTTTAAT---GAAAAACGGGATAGTTCT-----ATT
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                                                                                  IleGlyGlnGlyThrValAspPhePheAsnLysGluIleArgAspProSerLysAlaLeu
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quality sequence stop: {
Location/Qualifiers
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/Clone_Tyector: pHOS1; Site_1: Bst I; Constructed at The
/note="Yector: pHOS1; Site_1: Bst I; Constructed at The
/note="Yestor: pHOS1; Site_1: Bst I; Constructed at District Institutes of E. histolytica
using a method described by Clark and Diamond (Clark,
C.G., and Diamond, L.S. (1993) Entamoeba histolytica: a
method for isolate identification. Exp. Parasitol.
/7:450.). The DNA was mechanically sheared to give a
tight size distribution (~2 kb). The v + i method used for
the library construction is described in detail in Smith,
H.O. and Venter, J.C. (Making small insert libraries for
whole genome shotgun sequencing projects. In Genome
Sequencing: A Practical Approach, eds. M. Vaudin and B.
Barell, Oxford University Press, 1999)."
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                                                                                                                     Best Local Similarity:
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190 PheThrThrGlyLeuPheGlyTrpGlyIleLysArgAlaLeuLysGlnIleIleArgSer :::||| ||||| |||
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Email: Szhao@tigr.org
Clones are derived from the mouse BAC library RPCI-24. For BAC
Clones are derived from the mouse BAC library RPCI-24. For BAC
Library availability, please contact Pieter de Jong
(pdejong@mail.cho.org). Clones may be purchased from BACPAC
Resources (http://www.chori.org/bacpac/orderingframe.htm). BAC
page: http://www.tigr.org/tdb/bac_ends/mouse/bac_end_intro.html
Plate: 275 row: B column: 18
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Department of Eukaryotic Genomics
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Tsegaye,G., Geer,K., KrOl,M., Shvartsbeyn,A.,
Russell,D., de Jong,P. and Fraser,C.M.
Mouse BAC End Sequences from Library RPCI-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished (1999)
Other_GSSs: RPCI-24-275B18.TJ
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Mammalia; Eutheria; Rodentia;
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                                                                                                                                                                                                                                                                                                                                                                              /organism="Mus musculus"
/strain="C57BL/65"
/db_xref="taxon:10090"
/clone="RPCI-24-275B18"
/clone_lib="RPCI-24"
                                                                                                                                                                                                                                                              /cell_type="Spleen/Brain"
/note="Vector: pTARBAC1; Site_1: BamH1; Site_2: BamH1;
/note="Vector: pTARBAC1; Site_1: BamH1; Site_2: BamH1;
/note="Vector: pTARBAC1; Site_1: BamH1; Site_2: BamH1;
/note="Vector: pTARBAC1; Site_2: BamH1;
/note="Vector: pTARBAC1; Site_2: BamH1; Sites using MboI partially digested male C57BL/6JDNA."
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            9712 Medical Center Dr.,
Tel: 301 838 0208
Fax: 301 838 3543
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AZ667704
AZ667704.1 GI:11804970
                                                               Department of Eukaryotic Genomics
The Institute for Genomic Researc
                                                                                                                                  Eukaryota; Entamoebidae; Entamoeba.

1 (bases 1 to 830)

Loftus, B., Van Aken, S. and Fraser, C. Determination of clone end sequences

HM1:IMSS sheared DNA library
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                                                                                                 Contact: Brendan J Loftus
                                                                                                                 Unpublished (2000)
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Email: bjloftus@tigr.org
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Seq primer: M13-Forward
Class: shotgun
High quality sequence start: 33
High quality sequence stop: 815.
Location/Qualifiers
830
 ATAÇATGTGATAGAAGGATACTTAGAT-----
                                 LeuAlaThrValAlaGlyTyrValAspThrProTrpTyrLysLysTrpTyrMetLysLeu 277
                                                                                                                                                                                       GluHisSerValSerArgLeuGlnHisIleThrSerSerTyrLysAspTyrMetAspThr 237
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                                                                                                               GlnIleProAlaLeuProLysPheAlaLysArgPheSerLeuMetValValGlnArgLeu 257
                                                                                                                                                         CGATCAGAAATTGAAAGTTTAGTCCAT-----
                                                                                                                                                                                                                                                                                                                                               Ala-----SerPhePheAsnLysLeuSerPheThrThrGlyLeuPheGlyTrp 197
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/db_xref="tax.n:5759"
/clone_lib="Entamoeba histolytica Sheared DNA"
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/note="Vector: pHOS1; Site_l: Bt !; Constructed at The
/note="Vector: pHOS1; Site_l: Bt !; Constructed at The
/note="Vector: pHOS1; Site_l: Account of E. histolytica
/note: DNA isolated from broth cultures of E. histolytica
using a method described by Clark and Diamond (Clark,
C.G., and Diamond, L.S. (1993) Entamoeba histolytica: a
method for isolate identification. Exp. Parasitol.
77:450.). The DNA was mechanically sheared to give a
tight size distribution (-2 kb). The v + i method used for
the library construction is described in detail in Smith,
H.O. and Venter, J.C. (Making small insert libraries for
whole genome shotuun sequencing projects. In Genome
Sequencing: A Practical Approach, eds. M. Vaudin and B.
Barell, Oxford University Press, 1999)."
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FEATURES	TITLE JOURNAL COMMENT	REFERENCE AUTHORS	ACCESSION VERSION KEYWORDS SOURCE ORGANISM	RESULT 37 AZ891746/c LOCUS DEFINITION	Qy 400 Db 66	Qy 382 Db 117	Qy 366 Db 159	Qy 358 Db 219	Qy 338 Db 261	Oy 318 Db 294	Qy 298 Db 339	Qy 278 Db 381
pepartment of Eukaryotic Genomics The Institute for Genomic Research 9712 Medical Center Dr., Rockville, MD 20850, USA Tel: 301 838 0200 Fax: 301 838 0208 Email: szhao@tigr.org Clones are derived from the mouse BAC library RPCI-24. For BAC library availability, please contact Pieter de Jong (pdejong@mail.cho.org). Clones may be purchased from BACPAC Resources (http://www.chori.org/bacpac/orderingframe.htm). BAC end page: http://www.tigr.org/tdb/bac_ends/mouse/bac_end_intro.html plate: 209 row: J column: 3 Seq primer: T7 Class: BAC ends. Location/Qualifiers 1. 605 /organism="Mus musculus" /strain="C57BL/6J" /db_xref="taxon:10090" /clone="RPCI-24-20913"	m Library RPCI-24	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleost Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; 1 (bases 1 to 605) Zhao,S., Nierman,W., Malek,J., Shatsman,S., Akinret,B., Levin Zhao,G., Gorgan, K., Krol M., Shyartsheyn A., Gobregoorgis, F.	AZ891746 AZ891746.1 GI:13210691 GSS. house mouse. Mus musculus		AsnGluIleArgAspProSerLysAlaLeuIleArgLysVal 413 :::::	AlaGluAspLeuPheGluAsnLysIleGlyGlnGlyThrValAspPheIleAsn 399 :::::: ::::::::::::::::::::::::	GluIleArgAspProSerLysAlaLeuIleArgLysValSerThrGly 381 :: CAAGAAGATCAAGAATAACAGATATTATTTCTATTATTTCA 118	GlyThrValAspPheIleAsnAsn	AlaLeuLysGluLysValSerAsnAspAlaLysAspLeuPheGluAsnLysIleGlyGln 357 :: :: :: :: :: :: :: :: :: :: :: :: ::	AsnLysIleGlyGlnGlyThrValAspPhePheAsnLysGluIleArgAspProSerLys 337	ArgGluProSerLysAlaLeuLysGluLysValSerThrAspThrLysAspLeuPheGlu 317 ::: :::	LysasnPheMetValasnArgValPheIleProThrLysLysPhePheAsnLysGluIle 297 AGAATATATATCCAATTACTAAATTTATTAAATGGGCATAT 340

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                                                                                                                                     Mus musculus

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalla; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus

1 (bases 1 to 614)
                                                                                                                                                                                                                                                                                                                     AZ415896 614 bp DNA linear GSS 03-OCT-20010190A17R Mouse 10kb plasmid UUGC1M library Mus musculus genomic cione UUGC1M0190A17 R, DNA sequence.
Unpublished (2000)
                  plasmid inserts
                                    Mouse whole genome scaffolding with paired end reads from 10kb
                                                          Dunn, D., Aoyagi, A., Barber, M., Beacorn, T., Duval, B., Islam, H., Longacre, S., Mahmoud, M., Meenen, E., Pederse, M., Rose, M., Rose, R., Stokes, R., Tingey, A., von Niecand Wright, D., Weiss, R.
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/Cell_Type="Spleen/Brain"
/Cell_Type="Spleen/Brain"
/note="Wector: pTARBAC1; Site_1: BamH1; Site_2: BamH1;
/note="Wector: pTARBAC1; Site_1: BamH1; Site_2: BamH1;
RPCI-24 Mouse BAC Library produced by Pieter de Jong. The
library was cloned in the pTARBAC1 cloning vector at the
BamH1 sites using MboI partially digested male C57BL/6J
DNA."
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374 AAACAAGTAGAAGACATTAAAGAGGAAACACAAAAATCCCCTTAAAGAATTACAGGAAAAC
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                                                                                                                                                                                                                                                                                                                                                                                                                     225 GlnHisIleThrSerSerTyrLysAspTyrMetAspThrGlnIleProAlaLeuProLys
                                                                                            GTAGAGGACATCAAGAAGGACTTAAATAACTCACTTAAAGAAATACAGGAGAACACTGCT
                                                                                                                                                                                      CCTAACACACCT-----GAAAAGCTAGACCTGGATTTAAAAGCATATCTCATGATGATG
                                                                                                                                                                                                                            ValAspThrProTrpTyrLysLysTrpTyrMetLysLeuLysAsnPheMetValAsnArg
                                         -----LysAlaLeuLysGluLysValSerThrAspThrLysAspLeuPheGluAsn
                                                                                                                                       ValPheIleProThrLysLysPhePheAsn----LysGluIleArgGluProSer---
                                                                                                                                                                                                                                                                                                                           PheAlaLysArgPheSerLeuMetValValGlnArgLeuLeuAlaThrValAlaGlyTyr
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Insert Length: 10000 Std Err
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University of Utah
Rm. 308, Biomedical Polymers Research Bldg.,
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Fax: 801 585 7177
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     High quality sequence stop: 614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Seq primer: CACACAGGAAACAGCTATGACC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynuclectide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (gil4732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."
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/clone="UUGC1M0190A17"
/clone_lib="Mouse 10kb plasmid UUGC1M library"
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//ab host- FE. Coli strain XL10-Gold, T1-resistant, F-"
/note-"Vector: PWD42nv; Purified genomic DNA from M.
//mnsculus C57BL/6J (male) was obtained from the Jackson
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musculus C57BL/6J (male) was obtained
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                                                                                                                                                                                                                                                              Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error:
Plate: 0465 row: N column: 20
                                                                                                                                                                                                                                                                                                          Tel: 801 585 5606
Fax: 801 585 7177
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C., Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly,M., Rose,H., Rose,R., Stokes,R., Tingey,A., von Niederhausern,A. and Wright,D.,Weiss,R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A2022098 11near GSS 13 1M0465N20F Mouse 10kb plasmid UUGC1M library Mus musculus clone UUGC1M0465N20 F, DNA sequence.
                                                                                                                                                                                                                                                Seq primer: CGTTGTAAAACGACGGCCAGT
                                                                                                                                                                                                                                                                                                                                                                  University of Utah Genome University of Utah
                                                                                                                                                                                                                                                                                                                                                                                                            Unpublished (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                          Mouse
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                                                    /lab_host="E. Coli strain XL10-Gold, T1-resistant, F
/note="Vector: PWD42nv; Purified genomic DNA from M.
musculus C57BL/6J (male) was obtained from the Jack
                                                                                                                                                                                                                                                                                                                                                  Biomedical Polymers Research Bldg.,
                                                                                                            /organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="faxon:10090"
/clone="UUGC1M0465N20"
/clone=1ib="Mouse 10%b plasmid UUGC1M library"
(http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through 0.005 inch orifice at constant velocity. The sheared DNA
                                           Laboratory Mouse DNA Resource
                                                                                                   /sex="Male"
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Rodentia;
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polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptored DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pwD42 (gi14732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to adaptored worter name and transformed to the control of the sheared.
                                                                                                                                                                                                                                adaptored vector DNA, and transformed into chemically competent E. coli XLIO-Gold (Stratagene) cells and selected for ampicillin resistance."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          was blunt end-repaired with T4 DNA polymerase
0.317
101.00
42.93%
28.28%
4.28%
                                                                      Length:
Matches:
Conservative:
56
29
51
51
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Mismatches:

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US-09-807-459-2 (1-458) x AZ625698 (1-622)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               204 GGAAAACACAACCAAACAG-----GTAATGGAATTGAACAAAACCATC---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   263 GlyTyrValAspThrProTrpTyrLysLysTrpTyrMetLysLeuLysAsnPheMetVal 282
                                                                                                                                                                                                                                                                                                                                                                                                                                                  aLeuIleArgLysValTyrThrGluAlaAspAspLeuPheGluAsnLysIleGlyGlnGl 428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AsnArgValPheIleProThrLys-LysPhePheAsn-----LysGluIleArgGluPr 300
                                                                                                                                                                                                                                                                                                                                                                                        C----AAAAAGATTCTAACTCAA----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gAspProSerLysAlaLeuIleArgLysValSerThrGlyAlaGluAspLeuPheGluAs 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 eGluAsnLysIleGlyGlnGlyThrValAspPhePheAsnLysGluIleArgAspProSe 336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    oSer-----LysAlaLeuLysGluLysValSerThrAspThrLysAspLeuPh 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nLysIleGlyGlnGlyThrValAspPheIleAsnAsnGluIleArgAspProSerLysAl 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATAGGAACCCTAGGAAAGAAATCAGGAAACATAGATGCGAGCATCAACAACAGAATACA 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rLysAlaLeuLysGluLysValSerAsnAspAlaLysAspLeuPheGluAsnLysIleGl 356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGATACCCCAACACCCC-----AAAAAGCAAGACTCAGAATTAAAATCATATCTCATG
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                                                                                                                                                                                                                                                                                                                  yThrValAspPheIleAsnLysGluIleArgAspProSerLysAlaLeuIle
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H313240 700 bp DNA
CH230-101L12.TV CHORI-230 Segment 1 Rattus
CH230-101L112, DNA sequence.
BH313240
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Qy 368 A : Db 278 C	Qy 349 A Db 338 G	Db 440 C Qy 329 A Db 398 T	289 488 309	Alignment s Pred. No.: Score: Percent Sin Best Local Query Match DB: US-09-807-4	REFERENCE AUTHORS TITLE JOURNAL COMMENT FEATURES SOUICE SOUICE BASE COUNT ORIGIN	KEYWORDS SOURCE ORGANISM
ArgAspProSerLysAlaLeuIleArgLysValSerThrGlyAlaGluAspLeuPheGlu 387 :::::: caaGaGaTGGAAGAGAATCTCAGGAGCAGAAGAT243	AspLeuPheGluAsnLysIleGlyGlnGlyThrValAspPheIleAsnAsnGluIle 367 :::	CAAAAATCCCTGAAAGAATTCCAGGAAAACACAATCAAACAG	Ala GCC	Indepty Inde		Craniata. Vortebrata.

DB QY	В	Qy	В	Qy	Вb	Qy
433 80	140	425	200	405	242	388
433 IleAsnLysGluIleArgAspProSerLysAlaLeuIleArgLysVal 448	140 CTAAGGATAATAGGTATAGAAGAGAGTGAAGACTCCCACCTCAAAGGACGAGTAAATATC 81	425GlnGlyThrValAspPhe 432	200 CAGAAAAAGCTACTGGTCCAAAACATACAGGAAATAGAGGACTCAATGAGAAGATCAAAC 141	cThrGluAl	242TCCATAGAAATCATCAACTCAACTGTCAAAGATAATGTAAAG 201	388 AsnLysIleGlyGlnGlyThrValAspPheIleAsnAsnGluIleArgAsp 404
	_	32	11	24	01	04

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